

Small Business Innovation Research (SBIR) Program

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EPA Contractor Forum



Federal SBIR Program

- Set-aside program for small businesses to engage in federal R&D
- Program Goal is commercialization of technology
- Small Business retains rights to technology
- Budget = 2.5 % of Federal Extramural R&D Budget
- Over \$ 2.2 Billion in 2006

Participating Federal Agencies

- Department of Defense (DOD)
- Department of Health & Human Services (HHS)
- National Aeronautics & Space Admin (NASA)
- Department of Energy (DOE)
- National Science Foundation (NSF)
- Department of Homeland Security (DHS)
- Department of Agriculture (USDA)
- Department of Commerce (DOC)
- **Environmental Protection Agency (EPA)**
- Department of Transportation (DOT)
- Department of Education (ED)

EPA's SBIR Program Mission

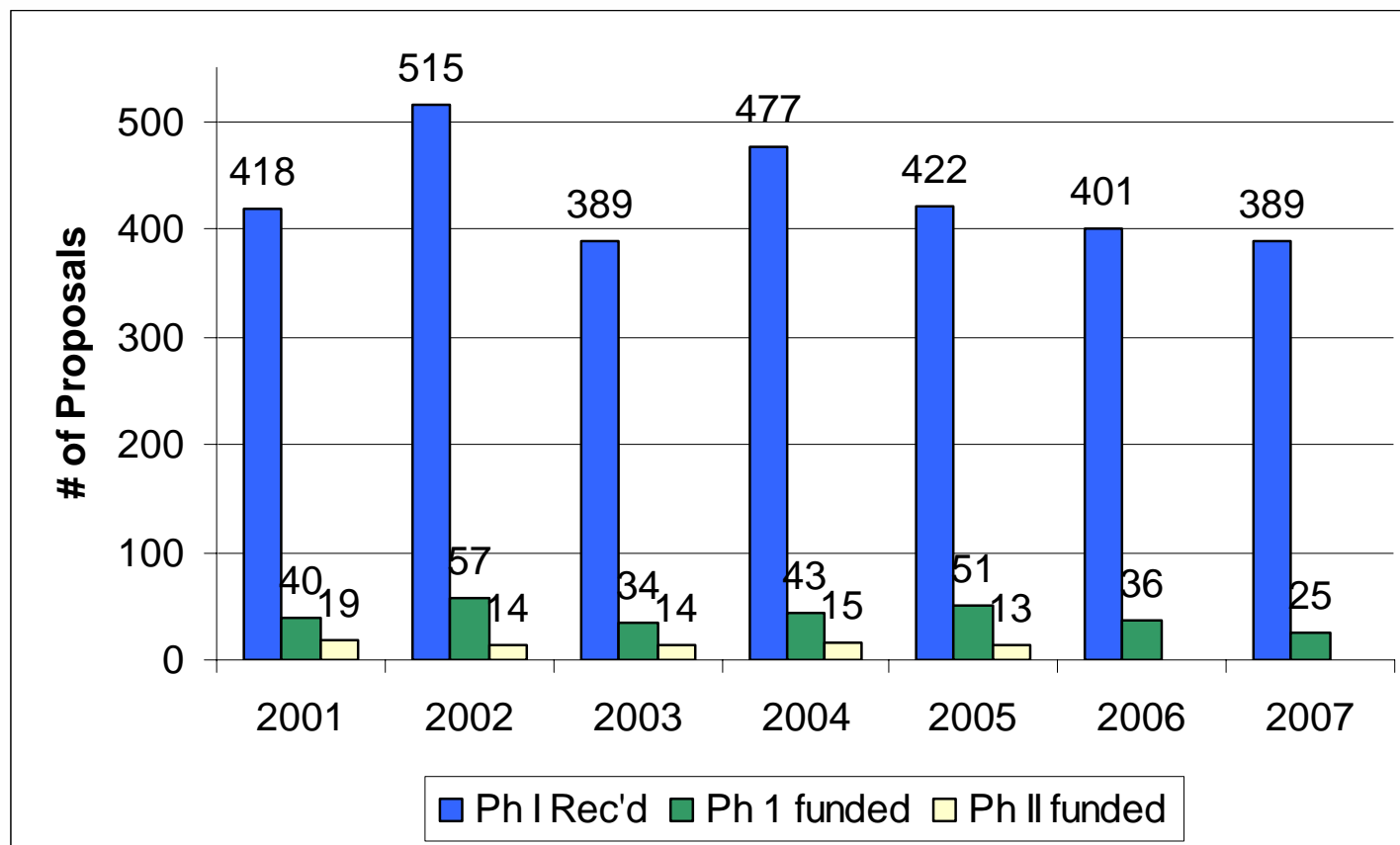
- To support the development and commercialization of innovative environmental technologies needed to solve priority environmental problems identified by EPA regions, program offices and laboratories



Budget

- FY03 - \$6.8 million
- FY04 - \$6.6 million
- FY05 - \$6.2 million
- FY06 - \$5.1 million
- FY07 - \$4.3 million
- FY08 - \$4.0 million (estimated)

Proposal Funding Rate



Phases of Awards

- **Phase I**

- Proof of Concept
- \$70,000
- 6 months

- **Phase II**

- Develop Phase I technology with focus on commercialization
- Base \$225,000
 - Commercialization Option (\$70,000)
 - Verification Testing Option (\$50,000)
- 2 years

2008 Schedule (Annual Cycle)

- Phase I Solicitation Open - March 20 to May 21, 2008
- Peer Review - September 2008
- Relevancy Review - October 2008
- Phase I Contracts Awarded - February 2009
- Phase II Solicitation Open - July 2009
- Phase II Contracts Awarded - March 2010

Research Topics - 2007 Solicitation

- Innovation in Manufacturing (OPPTS)
- Nanotechnology
- Green Buildings (GBW)
- Drinking Water (OW)
- Water and Wastewater (OW)
- Control of Air Pollution (OAR)
- Monitoring/Remote Sensing (OAR/OSWER/R2)
- Engine/Vehicle Emissions (R7)
- Animal Wastes & Waste to Energy (R7)
- Solid/Hazardous Waste (OSWER)
- Coal Bed Methane/Oil & Gas (R8)
- Disaster Debris Management (R4)
- Tribes/Small Communities (R10)
- Homeland Security (NHSRC)

Proposal Review Process

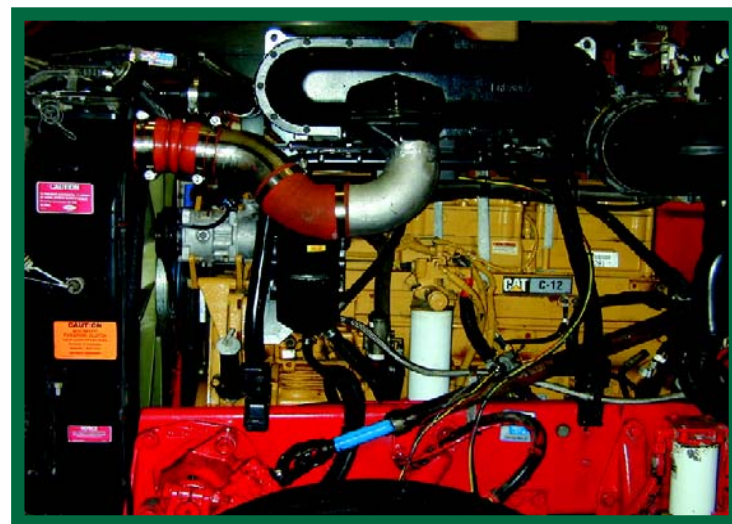
- External Third-party Peer Review
 - Ratings: Excellent, Very Good, Good, Fair, Poor
 - Five Criteria:
 - Scientific/Technical Quality and Soundness
 - Uniqueness and Originality
 - Cost Effectiveness and Environmental Benefit
 - Qualifications of Team
 - Commercialization Potential

Proposal Review Process (cont.)

- Internal EPA Relevancy/Programmatic Review
 - Only review those proposals rated Excellent and Very Good
 - Reviews done by EPA Program Offices, Regions and Labs
 - Three Criteria:
 - Relevance to EPA Needs and Program Priorities
 - Environmental Benefits
 - Scope of Application and Impact

Compact Membrane Systems

- NOx Reduction in Diesel Engines
 - Nitrogen-enriched air membrane
 - Commercial fluoropolymer modules operated over 1 million miles on 5 diesel trucks
 - NOx reduction over 50 percent
 - Excellent fouling resistance at high temp/pressure
- Partners with Praxair, Air Liquide, Caterpillar
- Markets: diesel trucks, locomotives, ships and ferries, retrofit for emergency diesel generators



NITON

- Lead Paint Analyzer
 - Can detect lead in paint, in soil and on filters
- Industry standard for analysis of lead in paint
- Received R&D 100 Award
- Received Lead Tech Product of the Year Award
- Participated in ETV Program
- Company was bought by Thermo Scientific



For More Information

- www.epa.gov/ncer/sbir
- SBIR Success Stories
- April Richards, 202-343-9836

